WHAT IS CLAIMED IS:

1. A vaccine composition comprising an amount of a first immunoglobulin molecule sufficient to induce an anti-idiotype response, said first immunoglobulin molecule comprising a variable region and being identical, except for one or more amino acid substitutions in said variable region, to a second immunoglobulin molecule, said second immunoglobulin molecule having at least one complementarity determining region (CDR) that has a portion of an antigen of a cell or protein involved in reproductive function, said one or more amino acid substitutions being the substitution of one or more amino acid residues that do not have a sulfhydryl group at one or more positions corresponding to one or more cysteine residues that form a disulfide bond in said second immunoglobulin molecule; and a pharmaceutically acceptable carrier.

2. The vaccine composition according to claim 1, wherein said antigen is a sperm antigen.

3. The vaccine composition according to claim 2, wherein said sperm antigen is SP-10, MSA-63 or LDH-C4.

4. The vaccine composition according to claim 1, wherein said antigen is selected from the group consisting of gonadotropin-releasing hormone, a gonadotropin, prostaglandin F2 alpha, oxytocin, gonadotropin receptors, SP-17, PH-20, FA-1, FA-2, PH-30, RSA, HAS-63, ZP1, ZP2, and ZP3.

5. The vaccine composition according to claim 1, wherein a first CDR contains a portion of an antigen of a cell or protein associated with reproductive function and a second CDR contains a portion of an antigen of a cell or protein associated with reproductive function.

6. The vaccine composition according to claim 5, wherein said first CDR contains a portion of SP-10 antigen, and said second CDR contains a portion of LDH-C4.

7. The vaccine composition according to claim 1, wherein said variable region is a light chain variable region and said amino acid residue that does not have sulfhydryl group is at a position corresponding to position 23 or 88 in said light chain variable regionof said second immunoglobulin molecule.

8. The vaccine composition according to claim 1, wherein said variable region is a heavy chain variable region and said amino acid residue that does not have a sulfhydryl group is at a position corresponding to position 22 or 92 in said heavy chain variable region of said second immunoglobulin molecule.

9. The vaccine composition according to claim 1, 7 or 8, wherein said amino acid residue is alanine.

10. The vaccine composition according to claim 1, in which said first immunoglobulin molecule is of a type selected from the group consisting of IgG, IgE, IgM, IgD and IgA.

11. A vaccine composition comprising an amount of a fragment of a first immunoglobulin molecule sufficient to induce an anti-idiotype response, said first immunoglobulin molecule comprising a variable region and being identical, except for one or more amino acid substitutions in said variable region, to a second immunoglobulin molecule, said second immunoglobulin molecule having at least one complementarity determining region (CDR) that has a portion of an antigen of a cell or protein involved in reproductive function, said one or more amino acid substitutions being the substitution of one or more amino acid residues that do not have a sulfhydryl group at one or more positions corresponding to one or more cysteine residues that form a disulfide bond in said second immunoglobulin molecule; and a pharmaceutically acceptable carrier.

12. The vaccine composition according to claim 11, wherein said antigen is a sperm antigen.

13. The vaccine composition according to claim 12, wherein said sperm antigen is SP-10, MSA-63 or LDH-C4.

14. The vaccine composition according to claim 11, wherein said antigen is selected from the group consisting of gonadotropin-releasing hormone, a gonadotropin, prostaglandin F2 alpha, oxytocin, gonadotropin receptors, SP-17, PH-20, FA-1, FA-2, PH-30, RSA, HAS-63, ZP1, ZP2, and ZP3.

15. The vaccine composition according to claim 11, wherein a first CDR contains a portion of an antigen of a cell or protein associated with reproductive function

and a second CDR contains a portion of an antigen of a cell or protein associated with reproductive function.

16. The vaccine composition according to claim 15, wherein said first CDR contains a portion of SP-10 antigen, and said second CDR contains a portion of LDH-C4.

17. The vaccine composition according to claim 11, wherein said variable region is a light chain variable region and said amino acid residue that does not have sulfhydryl group is at a position corresponding to position 23 or 88 in said light chain variable regionof said second immunoglobulin molecule.

18. The vaccine composition according to claim 11, wherein said variable region is a heavy chain variable region and said amino acid residue that does not have a sulfhydryl group is at a position corresponding to position 22 or 92 in said heavy chain variable region of said second immunoglobulin molecule.

19. The vaccine composition according to claim 11, 17 or 18, wherein said amino acid residue is alanine.

20. The vaccine composition according to claim 11, in which said first immunoglobulin molecule is of a type selected from the group consisting of IgG, IgE, IgM, IgD and IgA.

21. A method of contraception in a subject comprising administering to said subject an amount of a first immunoglobulin molecule sufficient to induce an anti-idiotype response, said first immunoglobulin molecule comprising a variable region and being identical, except for one or more amino acid substitutions in said variable region, to a second immunoglobulin molecule, said second immunoglobulin molecule having at least one complementarity determining region (CDR) that has a portion of an antigen of a cell or protein involved in reproductive function, said one or more amino acid substitutions being the substitution of one or more amino acid residues that do not have a sulfhydryl group at one or more positions corresponding to one or more cysteine residues that form a disulfide bond in said second immunoglobulin molecule.

22. The method according to claim 21 which further comprises isolating an antibody from said subject, said antibody recognizing the idiotype of said second immunoglobulin molecule and administering said antibody to a second subject.

23. The method according to claim 21, wherein said antigen is a sperm antigen.

24. The method according to claim 23, wherein said sperm antigen is SP-10, MSA-63 or LDH-C4.

25. The method according to claim 21, wherein said antigen is selected from the group consisting of gonadotropin-releasing hormone, a gonadotropin, prostaglandin F2 alpha, oxytocin, gonadotropin receptors, SP-17, PH-20, FA-1, FA-2, PH-30, RSA, HAS-63, ZP1, ZP2, and ZP3.

26. The method according to claim 21, wherein a first CDR contains a portion of an antigen of a cell or protein associated with reproductive function and a second CDR contains a portion of an antigen of a cell or protein associated with reproductive function.

27. The method according to claim 26, wherein said first CDR contains a portion of SP-10 antigen, and said second CDR contains a portion of LDH-C4.

28. The method according to claim 21, wherein said variable region is a light chain variable region and said amino acid residue that does not have sulfhydryl group is at a position corresponding to position 23 or 88 in said light chain variable regionof said second immunoglobulin molecule.

29. The method according to claim 21, wherein said variable region is a heavy chain variable region and said amino acid residue that does not have a sulfhydryl group is at a position corresponding to position 22 or 92 in said heavy chain variable region of said second immunoglobulin molecule.

30. The method according to claim 21, 28 or 29, wherein said amino acid residue is alanine.

31. The method according to claim 21, in which said first immunoglobulin molecule is of a type selected from the group consisting of IgG, IgE, IgM, IgD and IgA.